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published in

The Gerontologist
2020

DOI (link to publisher)

[10.1093/geront/gnz129](https://doi.org/10.1093/geront/gnz129)

document version

Publisher's PDF, also known as Version of record

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citation for published version (APA)

Szabó, Á., Klokgieters, S. S., Kok, A. A. L., van Tilburg, T. G., & Huisman, M. (2020). Psychological resilience in the context of disability: A study with Turkish and Moroccan young-old immigrants living in the Netherlands. *The Gerontologist*, 60(2), 259-269. <https://doi.org/10.1093/geront/gnz129>

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Special Issue: Immigration and Aging: Research Article

Psychological Resilience in the Context of Disability: A Study With Turkish and Moroccan Young-Old Immigrants Living in the Netherlands

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Received: April 30, 2019; Editorial Decision Date: August 22, 2019

Decision Editor: Nicholas G. Castle, PhD

Abstract

Background and Objectives: The disability paradox postulates that some individuals with severe functional limitations demonstrate psychological resilience, that is, good mental health and quality of life. Resilience to disabilities has been linked to psychological (e.g., mastery) and social factors (e.g., social provisions). It is, however, less clear whether cultural factors can provide additional resources for resilience building in older immigrants. We investigated the extent to which sociodemographic, psychosocial, and cultural factors contributed to psychological resilience to disabilities among immigrants of Turkish and Moroccan descent in the Netherlands.

Research Design and Method: The sample included 478 older immigrants aged 55–65 years. Data were analyzed using latent profile analysis and multinomial logistic regressions.

Results: Five categories were identified: (a) High physical and emotional functioning; (b) High physical but poor emotional functioning; (c) Low physical but high emotional functioning (resilient); (d) Low physical and emotional functioning; and (e) Low physical and very low emotional functioning. Resilient functioning (reference category) was associated with poorer Dutch language proficiency, lower levels of loneliness, greater mastery, and more religious coping.

Discussion and Implications: Findings provide support for the disability paradox and highlight social provisions, mastery, and religiosity/spirituality as important resources for psychological resilience in older labor migrants. Poor Dutch language proficiency is discussed as a potential factor contributing to severe functional limitations in the resilient category.

Keywords: Activities of daily living, Cultural resources, Depression, Functional limitations, Labor migrants, LASA, Resilience

Due to an influx of labor migrants from Turkey and Morocco in the 1960s and 1970s, and the subsequent migration of their children and partners under family reunification provisions (Schellingerhout, 2004), migrants of Turkish and Moroccan descent together represent a growing proportion of the Netherlands's older adult population (aged 55 years

and over; Statistics Netherlands, 2018). Research shows that labor migrants are at greater risk of experiencing adverse health outcomes in old age compared with their native peers (Bolzman, Poncioni-Derigo, Vial, & Fibbi, 2004; Lum & Vanderaa, 2010). Indeed, relative to native Dutch, older migrants from Turkey and Morocco report

poorer health and more severe disabilities (Klokgieters, van Tilburg, Deeg, & Huisman, 2018b; Schellingerhout, 2004).

Aging into disabilities (i.e., experiencing difficulties with activities due to physical health limitations) increases the likelihood of comorbidity, early mortality (Millan-Calenti et al., 2010), and mental health difficulties (Gayman, Turner, & Cui, 2008), which create added barriers to achieving good quality of life for older immigrants. However, as illustrated by the disability paradox, disability does not necessarily lead to poor psychological outcomes. Some people with severe disabilities report good quality of life (Albrecht & Devlieger, 1999; Fellinghauer, Reinhardt, Stucki, & Bickenbach, 2012). We interpret these findings within the framework of psychological resilience, defined as demonstrating positive psychological outcomes in the face of significant adversity (Masten, 2001). The resilience framework posits that effective mobilization of psychological and social resources is fundamental to achieving good outcomes when adversity is present (Ledesma, 2014).

We investigated the disability paradox in older Turkish and Moroccan immigrants in the Netherlands, and examined the extent to which sociodemographic, psychosocial, and cultural resources contributed to resilient functioning. Sociodemographic and psychosocial factors have been found to promote resilience in older adults (Bolton, Praetorius, & Smith-Osborne, 2016), including migrants (Diwan, Jonnalagadda, & Balaswamy, 2004; Klokgieters et al., 2018b). However, it is less understood what role cultural resources play in resilience for older migrants. Cultural resources include cultural values (e.g., family orientation), identities (e.g., cultural identity), norms, and behaviors (e.g., host community participation) that facilitate positive psychological outcomes. Research with young and middle-aged migrants suggests that cultural resources can function as protective factors to wellbeing against a range of stressors (Arnetz, Rofa, Arnetz, Ventimiglia, & Jamil, 2013; Dawson, 2009; Diwan et al., 2004), but it remains unclear whether these stress-buffering effects extend to managing age-related physical decline.

Factors Promoting Resilience in the Context of Disabilities

Disability can be defined as a situation in which an individual experiences restrictions to performing activities due to physical conditions (Verbrugge & Jette, 1994). Some resources offer compensatory strategies to alleviate the negative consequences of disability. Positive adaptation to disability might be driven by a combination of factors (Fellinghauer et al., 2012). No systematic relationship has been reported between resilience and chronological age (Hildon, Montgomery, Blane, Wiggins, & Netuveli, 2010; Netuveli, Wiggins, Montgomery, Hildon, & Blane, 2008), but women are more likely to be resilient against physical decline (MacLeod, Musich, Hawkins, Alsgaard, & Wicker, 2016). Results pertaining to socioeconomic position are

mixed. Financial resources have been shown to mitigate the detrimental impact of disabilities on wellbeing among older adults (Smith, Langa, Kabeto, & Ubel, 2005). Other studies, however, reported no effects of education, social class, or ownership of assets on resilience to adverse life events in old age (Netuveli et al., 2008). One study from the Netherlands found that income was a protective factor for older native Dutch, but not for older immigrants (Klokgieters et al., 2018b).

More robust effects have been reported with social and personal factors. Albrecht and Devlieger (1999) found that people with severe disabilities attributed their resilience to maintaining control, social support, faith and spirituality, and the ability to integrate into the community. Similar findings were reported by studies with older adults, suggesting that resilience to adversity in old age is strongly influenced by the availability of both social (e.g., close and satisfying relationships) and psychological (e.g., sense of mastery) resources (Hildon et al., 2010; Kok, Van Nes, Deeg, Widdershoven, & Huisman, 2018; MacLeod et al., 2016; Netuveli et al., 2008).

Studies examining resilience to adversity in older immigrants, as opposed to studies in native populations, are largely consistent with the broader literature. Investigating psychological adaptation to stressful life events among Indian older immigrants in the United States, Diwan et al. (2004) found that a strong sense of mastery predicted more positive, and less negative, affect. Likewise, Klokgieters et al. (2018b) demonstrated that mastery mitigated the disabling effect of physical impairment for older Turkish immigrants in the Netherlands. The protective effects of social resources against migration-related stressors have also been documented in samples of adult labor migrants (van der Ham, Ujano-Batangan, Ignacio, & Wolffers, 2014; Wong & Song, 2008).

Spirituality or religious coping is commonly associated with positive adaptation in older adults with disabilities (Aflakseir & Coleman, 2009; Rahnama et al., 2015). Religious coping has been shown to buffer the negative effects of migration-related stress in immigrant and ethnic minority groups (Adam & Ward, 2016; Fernandez & Loukas, 2014), and it has been linked to better psychological adaptation in older immigrants (Diwan et al., 2004). However, a recent study found no evidence for religious practices promoting resilience for older immigrants with poor physical functioning (Klokgieters, van Tilburg, Deeg, & Huisman, 2019).

Cultural Resources and Resilience

Cultural resources may offer compensatory strategies for maintaining wellbeing in the context of disability. Although research in this area is scarce, we posit that tentative assumption can be drawn from studies on resilience to general migration-related stressors (e.g., difficulties with cultural adaptation, discrimination). Ethnic identity and

heritage culture maintenance practices have been widely linked to positive psychological outcomes (Jasinskaja-Lahti, Liebkind, Jaakkola, & Reuter, 2006; Vedder & Virta, 2005; Virta, Sam, & Westin, 2004) and described as protective factors against migration-related stressors (Perreira et al., 2019; Umaña-Taylor, Tynes, Toomey, Williams, & Mitchell, 2015).

While there has been less research on national belonging, studies with immigrants and ethnic minorities show that feeling as part of the national fabric is conducive to positive psychological outcomes (Amit & Bar-Lev, 2015; Klok, Van Tilburg, Suanet, Fokkema, & Huisman, 2017). Likewise, adoption of culturally relevant behaviors can become an important resource for adaptation in the face of adversity (Jasinskaja-Lahti et al., 2006). Specifically, language skills have been linked to positive psychological outcomes in labor migrants (Chen, Benet-Martinez, & Bond, 2008), lower rates of disability (Eschbach, Al-Snih, Markides, & Goodwin, 2007), and better access to adequate and sufficient care (Fassaert, Hesselink, & Verhoeff, 2009) in older immigrants. When physical capacity is limited, having the necessary cultural competencies to navigate health systems can be crucial in facilitating adaptation to disabilities.

Present Study

We investigated whether cultural resources contribute to psychological resilience to disabilities, beyond sociodemographic and psychosocial factors, in older migrants. Resilience was conceptualized as maintaining good emotional functioning (assessed as low levels of depression symptoms) despite experiencing substantial functional limitations (assessed as limitations in activities of daily living). Based on previous findings, we examined age, gender, socioeconomic status (education and income), and length of residence as *sociodemographic correlates* of resilient functioning.

Provisions of social relationships, mastery, and religious coping were included as *psychosocial predictors* of resilience. Loneliness was used as an indicator of lack of social provisions. We conceptualized loneliness as a combination of emotional (i.e., absence of intimate relationships) and social isolation (i.e., absence of engaging relationships; De Jong Gierveld & Kamphuis, 1985). We hypothesized that lower levels of loneliness, higher levels of mastery, and greater use of religious coping would be associated with a greater likelihood of resilient (compared with poor) functioning.

Cultural resources included cultural identity exploration, host community participation, cultural closeness, feelings of loss, and Dutch language proficiency. Greater cultural identity exploration, more host community participation and greater perceived closeness, greater feelings of loss, and better Dutch language proficiency were expected to predict resilient (compared with poor) functioning.

Methods

Sample

Data were collected as part of the Longitudinal Aging Study Amsterdam (LASA; Hoogendijk et al., 2016; Huisman et al., 2011). A cohort of Moroccan and Turkish immigrants living in the Netherlands was included in LASA in 2013–2014 to investigate social, physical, emotional, and cognitive functioning, and to study how characteristics of migration contributed to functioning in these domains. Turkish and Moroccans are the third and second largest groups of older non-Western immigrants living in the Netherlands (Statistics Netherlands, 2018). They are of interest to policymakers because they are exceptionally disadvantaged and have a greater distance to the Dutch population in terms of culture, language proficiency, and mean level of education than other immigrant groups (Schellingerhout, 2004).

Immigrants of Turkish and Moroccan origin born between 1948 and 1957 were randomly selected from registers of 15 Dutch cities. Trained interviewers of the same ethnicity and gender as the respondent conducted face-to-face interviews. Study materials were available in Dutch, Turkish, Tarafit, and Moroccan Arabic. The response rate was 45%, resulting in a sample of 478 older immigrants (269 Turkish and 209 Moroccan).

Measures

Functional limitations

Participants indicated the extent to which they were able to perform seven daily activities: Walking up and down a staircase, using own or public transportation, cutting toenails, dressing and undressing, sitting down and standing up from a chair, walking outside, and taking a shower or bathing. Responses were given on a five-point scale: 0 “Yes, without difficulty”; 1 “Yes, with some difficulty”; 2 “Yes, with much difficulty”; 3 “Only with help”; and 4 “No, I cannot.” A total score was derived by counting the number of activities performed “with difficulty” or worse.

Emotional functioning

Depression symptoms were assessed with the 20-item Center for Epidemiologic Studies Depression scale (Radloff, 1977). Items are answered on a four-point scale (anchored at 0 “rarely or never” and 3 “mostly or always”) and cover depression symptoms experienced in the past week. A total score is created by summing all item scores after reversing scores on four positive items. A score of 16 or higher has been shown to have acceptable sensitivity (100%) and specificity (88%) to indicate risk for clinically relevant depression in older adult samples in the Netherlands (Beekman et al., 1997). The construct validity and equivalence of the scale across the two ethnic groups have been established (Klokieters, Mokkink, Galenkamp, Beekman, & Comijs, 2018a). Reliability of the scale was supported ($\alpha = .91$).

Sociodemographic resources

Net monthly household income (ranging from less than 1,021 euro/month to 2,950 euro/month or more), education (assessed in nine levels and further divided into 0 “no formal education” and 1 “formal education”), country of origin (0 “Morocco,” 1 “Turkey”), length of stay (number of years since immigrating to the Netherlands), age, and sex (0 “male,” 1 “female”) were included as sociodemographic resources.

Psychosocial resources

Mastery

The Pearlin Mastery Scale (Pearlin & Schooler, 1978) assesses perceptions of personal control over life events and stressful situations. Five of the positively phrased items of the scale were administered using a five-point scale (anchored at 1 “strongly disagree” and 5 “strongly agree”), and a total score was created by summing all item scores. Reliability of the scale was supported ($\alpha = .84$).

Loneliness

The 11-item De Jong Gierveld Loneliness Scale (De Jong Gierveld & Kamphuis, 1985) includes positively and negatively phrased items. Participants indicate their agreement with items on a three-point scale (“no,” “more or less,” “yes”). Responses in the loneliness direction are considered to indicate experiences of loneliness and receive a score of “1.” A total score was created by summing all item scores, which demonstrated acceptable reliability ($\alpha = .85$). The construct validity and equivalence of the scale across ethnic groups in the Netherlands have been established (Uysal-Bozkir, Fokkema, MacNeil-Vroomen, Van Tilburg, & De Rooij, 2017).

Religious coping

Two items measured participants’ tendency to turn to faith, religion, and spirituality when dealing with stressful life events: “In crisis, I turn to God for strength, support and guidance” and “I confess my sins and ask for God’s forgiveness”. Responses were given on a four-point scale (anchored at 1 “never” and 4 “very often”) and a mean score was derived. The reliability of the scale has been previously tested with Turkish and Moroccan immigrants in the Netherlands (Braam et al., 2010) and was supported in the present study as well ($\alpha = .81$).

Cultural resources

Dutch language proficiency

Dutch language skills were measured with three items (“I can speak Dutch well,” “I can read Dutch well,” and “I can understand spoken Dutch well”) on a four-point scale (anchored at 1 “strongly disagree” and 4 “strongly agree”). Ratings were combined into a mean score. Reliability was supported ($\alpha = .85$).

Closeness with Dutch

Three items assessed perceived closeness to majority Dutch: “I sometimes get visits from Dutch acquaintances,” “I like to speak to Dutch acquaintances about what worries me,” and “It is all right for a Dutch acquaintance to babysit my children.” Response options ranged from 1 “strongly disagree” to 4 “strongly agree,” and a mean score was derived. Reliability was supported ($\alpha = .72$).

Feelings of loss

Five items measured feelings of loss in connection with the country of origin (e.g., Turkey/Morocco is always in my mind and memories’) and a lack of belonging to the host society (e.g., “I belong here less than in Turkey/Morocco”) on a yes-no basis. A total score was created by summing all item scores. Reliability was supported ($\alpha = .70$).

Participation in Dutch organizations

Participants indicated whether they were active in 10 types of organizations (organization for seniors, church/mosque/religious organization, cultural organization, neighborhood association, women’s association, organization with a social aim, organization for patients, recreation/music/hobby club, sporting club, and other) and the proportion of Dutch members in each organization (“very few,” “many,” and “almost only Dutch members”). Any organization with “many” or “almost only Dutch members” received a score of 1 and a summary score was created.

Cultural identity exploration

Six items assessed participation in one’s cultural group, motivations to acquire knowledge about one’s cultural heritage, and being up to date about cultural and political events from one’s home country. Items, such as “I follow political and recent events from Morocco/Turkey,” were rated on a four-point scale ranging from 1 “never” to 4 “often,” and a mean score was derived. Reliability was supported ($\alpha = .70$).

Data Analysis

We performed a latent profile analysis in MPlus on depression symptom domains and difficulties with activities of daily living. Models with an increasing number of profiles were compared. A significant adjusted Lo-Mendell-Rubin Likelihood Ratio Test (aLMR-LRT; Lo, 2005; Lo, Mendell, & Rubin, 2001), a lower Bayesian (BIC), and adjusted Bayesian information criterion (aBIC; Nylund, Asparoutiov, & Muthen, 2007), and higher entropy and posterior class membership probabilities (Clark & Muthen, 2009) were considered to indicate improved model fit. Other criteria included classes that represent more than 5% of the total sample and reflect theoretically plausible, distinctive subcategories (Ram & Grimm, 2009). To examine correlates of latent class membership, we used a classify-analyze approach. Final

categories were based on the highest class probability and exported to SPSS for further analyses. Differences across profiles in sociodemographic factors, psychosocial and cultural resources were tested with univariate analyses. A multinomial regression analysis was performed to investigate factors that differentiated the resilient (reference category) from other types of functioning. Psychosocial and cultural variables that emerged as statistically significant correlates of profile membership in univariate analyses were entered as predictors. To reduce the number of predictors and increase statistical power, backwards stepwise regression was applied for sociodemographic variables and for interactions with country. To improve model robustness, bootstrapping was performed with 1,000 independent samples. Missing data were handled with the Full Information Maximum Likelihood function in Mplus. The percentage of missing data was low: less than 4% for depression scores ($n = 18$) and less than 1.5% for functional limitations ($n = 6$). Two participants had missing scores on both measures. Multiple imputation with expectation-maximization was used in SPSS for the multinomial regression.

Results

Descriptive Analyses

Table 1 presents the demographic description of the sample. Turkish were more likely to obtain formal education and report previous employment than Moroccans. There were no differences in age, sex, income, and length of stay in the Netherlands. Significant differences emerged in all study variables (with small to medium effect sizes), except participation in Dutch organizations. Moroccans reported less functional limitations, lower levels of depression, loneliness, feelings of loss, cultural identity exploration and closeness with Dutch, as well as higher levels of mastery, religious coping, and Dutch language proficiency. Results of statistical analyses are reported in Table 2. Correlations are reported in Supplementary Table 1.

Latent Profile Analysis

The aLMR-LRT, BIC, aBIC, and entropy indicated improved fit up to six profiles (Table 3). One category in the six-profile solution accounted for a small proportion of the sample ($n = 24$; 5%). It represented a variation of a larger category with more extreme values, reflecting poor physical and very poor emotional functioning ($n = 85$, 18%; Supplementary Figure 1). After considering the fit indices, the size and theoretical distinctiveness of the emerging categories, and issues with statistical power in subsequent analyses, we retained the five-profile solution (Figure 1). One quarter of the sample ($n = 120$, 25%) indicated high emotional and physical functioning. A similar proportion ($n = 108$, 23%) was characterized by poor emotional functioning despite high physical functioning. A small category ($n = 45$, 10%) displayed resilience,

that is, high emotional functioning despite poor physical functioning. The remaining two categories represented poor emotional and physical functioning ($n = 143$, 30%) and very poor emotional functioning combined with poor physical functioning ($n = 60$, 13%). Descriptive statistics of profiles and univariate analyses by study variables are reported in Supplementary Table 2. Significant differences emerged across profiles in all study variables, except age, participation in Dutch organizations, and perceived closeness with Dutch. These variables were excluded from subsequent analyses. Employment was also excluded because of the low number of participants reporting current employment in two of the profiles.

Multinomial Logistic Regression Analysis

The resilient profile served as the reference category. Odds ratios and statistical tests are reported in Table 4. Those with high emotional and physical functioning were more likely to be men, have higher income, report better Dutch language proficiency, and have been in the Netherlands for a shorter time than those in the resilient profile. Being in the poor emotional and physical functioning category, compared to the resilient category, was associated with lower levels of mastery and greater loneliness. Membership in the poor emotional but high physical functioning group was associated with greater loneliness, lower levels of religious coping, and better language proficiency when compared with being in the resilient profile. Being assigned to the very poor emotional and poor physical functioning profile, as opposed to the resilient profile, was associated with Moroccan origin, lower levels of mastery, greater loneliness, less religious coping, and better language proficiency.

Discussion

The primary goal of the study was to probe the disability paradox in older Turkish and Moroccan immigrants living in the Netherlands. We found five distinct profiles with different combinations of emotional and physical functioning. Most participants had limitations in physical or emotional functioning, and almost half of them reported difficulties in both areas. Although an alarmingly high figure, it is in line with previous findings on the failing health of older labor migrants (Bolzman et al., 2004; Lum & Vanderaa, 2010). A quarter of the sample was functioning on a high level and a small proportion displayed resilience, that is, good emotional functioning despite reporting the most functional limitations. This suggests that maintaining good quality of life when living with physical disabilities is a real possibility for older labor migrants. While Moroccans generally reported lower levels of functional limitations and depression symptoms than Turkish, this was not reflected in rates of resilient functioning. In contrast, Moroccans were more likely to experience extremely poor emotional functioning in combination with functional limitations.

Table 1. Descriptive Statistics of the Total Sample and by Country or Origin

	Total		Moroccan		Turkish		Test of differences between Turkish and Moroccans
	N	%	N	%	N	%	
Sample size	478	100	209	44	269	56	
Sex							$\chi^2(1) = 1.59, ns$
Male	275	58	127	61	148	55	
Female	203	42	82	39	121	45	
Education							$\chi^2(1) = 38.45, p < .001$, Cramer's $V = .29$
Did not complete formal education	161	34	103	49	58	22	
Obtained formal education	317	66	106	51	211	78	
Elementary	188	39	42	20	146	54	
Lower vocational	16	3	7	3	9	3	
General intermediate	48	10	22	11	26	10	
Intermediate vocational	13	3	10	5	3	1	
General secondary	13	3	3	1	10	4	
Higher vocational	15	3	11	5	4	2	
College	13	3	5	2	8	3	
University	11	2	6	3	5	2	
Income							$Z = 1.28, ns$
Less than 1,021 euro	97	20	43	21	54	20	
1,022–1,134 euro	67	14	32	15	35	13	
1,135–1,361 euro	111	23	51	24	60	22	
1,362–1,588 euro	61	13	30	14	31	12	
1,589–1,815 euro	43	9	21	10	22	8	
1,816–2,042 euro	29	6	12	6	17	6	
2,043–2,269 euro	31	7	6	3	25	9	
2,270–2,495 euro	9	2	3	1	6	2	
2,496–2,722 euro	11	2	2	1	9	3	
2,723–2,949 euro	5	1	2	1	3	1	
2,950 euro or more	14	3	7	3	7	3	
Employment							$\chi^2(2) = 7.20, p = .027$, Cramer's $V = .12$
Never been employed	85	18	43	21	42	16	
Previously employed	282	59	109	52	173	64	
Currently employed	111	23	57	27	54	20	
Age: $M (SD)$	60.9	(3.0)	61.1	(2.9)	60.8	(3.1)	$t(476) = 1.30, ns$
Length of stay: $M (SD)$	36.2	(7.6)	35.6	(7.7)	36.7	(7.5)	$t(476) = -1.52, ns$

The second goal of the study was to investigate the extent to which sociodemographic, psychosocial, and cultural factors contributed to resilient functioning. Only sociodemographic variables and language proficiency differentiated between the highly functioning and resilient categories. Those in the highly functioning category reported higher income and better Dutch language proficiency, were more likely to be men and immigrated more recently. Language proficiency is a key predictor of employment prospects and future earnings (Dustmann & Fabbri, 2003; Velcoff, Hernandez, & Keys, 2010). Furthermore, poor language skills are one of the main barriers to health care use for immigrants (Fassaert et al., 2009). While participants in the two categories possessed similar psychosocial resources, the better socioeconomic position is likely to have enabled those in the highly functioning category to

maintain better physical health as they aged. Considering their higher income, better language proficiency and more recent arrival, it is likely that this profile represents a different group than traditional labor migrants.

Compared with the two categories displaying poor emotional and physical functioning, the resilient category demonstrated advantage in psychosocial resources, consistently scoring lower on loneliness and reporting greater levels of mastery. Those with resilient functioning also reported higher levels of religious coping than the category characterized by very poor emotional and poor physical functioning. These findings confirm previous research with both older migrants (Diwan et al., 2004) and the general population (Hildon et al., 2010; MacLeod et al., 2016; Netuveli et al., 2008), highlighting the protective role of

Table 2. Scale Descriptive Statistics: Mean, Standard Deviation, and Reliability

	Total Sample			Turkish			Moroccan			Test of Differences
	M	SD	α	M	SD	α	M	SD	α	
Difficulties with activities of daily living	2.45	2.42	-	3.03	2.59	-	1.69	1.95	-	$t(470) = -6.22, p < .001, d = 0.58$
Depression symptoms	17.48	11.44	.91	18.48	11.35	.91	16.18	11.47	.92	$t(458) = -2.15, p = .032, d = 0.23$
Mastery	14.99	5.23	.84	13.71	4.58	.81	16.63	5.55	.83	$t(476) = 6.29, p < .001, d = 0.57$
Loneliness	5.2	3.23	.85	5.74	3.27	.86	4.50	3.05	.84	$t(476) = -4.21, p < .001, d = 0.39$
Religious coping	3.39	0.79	.81	3.24	0.83	.83	3.59	0.69	.75	$t(476) = 4.86, p < .001, d = 0.46$
Dutch language proficiency	2.45	0.81	.85	2.34	0.72	.85	2.60	0.89	.83	$t(476) = 3.49, p = .001, d = 0.32$
Closeness with Dutch	2.46	0.83	.72	2.57	0.67	.44	2.31	0.98	.58	$t(476) = -3.54, p < .001, d = 0.31$
Feelings of loss	3.37	1.48	.70	3.66	1.39	.69	3.01	1.51	.66	$t(476) = -4.87, p < .001, d = 0.45$
Cultural identity (exploration)	1.96	0.56	.70	2.18	0.48	.68	2.01	0.54	.70	$t(476) = -3.64, p < .001, d = 0.33$
Participation in Dutch organizations										$\chi^2(2) = 0.24, ns$
0 (<i>n</i> , %)	410	85.8%	-	229	85.1%	-	181	86.6%	-	
1 (<i>n</i> , %)	47	9.8%	-	28	10.4%	-	19	9.1%	-	
2 or more (<i>n</i> , %)	21	4.4%	-	12	4.5%	-	9	4.3%	-	

Table 3. Latent Profile Analysis: Fit Indices

	N per category	aLMR-LRT	BIC	aBIC	Entropy
2 Profiles	238; 238	494.2***	9087	9046	.818
3 Profiles	211; 164; 101	202.8**	8908	8851	.814
4 Profiles	60; 104; 166; 146	74.9+	8862	8789	.770
5 Profiles	120; 143; 108; 45; 60	55.8*	8835	8746	.775
6 Profiles	120; 95; 40; 112; 85; 24 122; 83; 36; 115; 86; 24;	42.9*	8822	8717	.781
7 Profiles	10	29.5	8823	8702	.795

Note: aBIC = adjusted BIC; aLMR-LRT = adjusted Lo-Mendell-Rubin Likelihood Ratio Test; BIC = Bayesian Information Criterion.

+, $p < .10$; *, $p < .05$; **, $p < .01$; ***, $p < .001$.

social support, sense of control, and spirituality/religiosity after acquiring a physical disability.

The only cultural variable that consistently differentiated between the resilient and the other categories was language proficiency. However, contrary to our prediction, the resilient category reported the poorest overall proficiency in the Dutch language. This may be explained in the light of the integration paradox (Buijs, Demant, & Hamdy, 2006), which posits that knowledge of the Dutch language might lead to more exposure to the exclusionary aspects of not being Dutch, and thus may have a negative impact on wellbeing (Eijberts & Ghorashi, 2017).

The lack of effects with cultural variables could also be attributed to theoretical and methodological issues. Cultural resources might contribute to resilience indirectly

through promoting social relationships and building social capital (Ryan, Sales, Tilki, & Siara, 2008). The resilient category reported the most language difficulties but relatively low levels of loneliness and high ethnic identity exploration. It is likely that they received social support primarily from their ethnic community. Second, the interview assessed a limited number of cultural variables. For example, there are two mechanisms underlying cultural identity development: exploration, which involves active participation in the ethno-cultural community, and commitment, which is affirmation of group membership (Phinney, 1992). This study included a measure of exploration but did not assess commitment. While exploration in combination with commitment is generally predictive of positive psychosocial functioning (Umaña-Taylor & Updegraff, 2007),

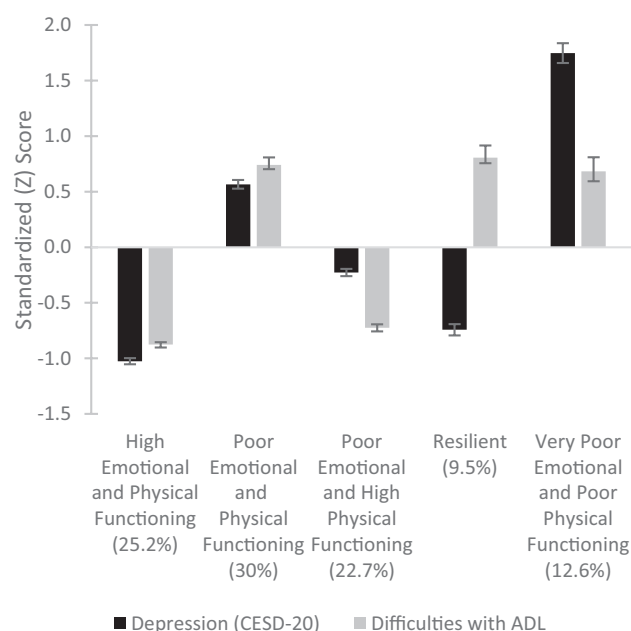


Figure 1. Prototypical Profile Configurations: Five-profile Solution. Confidence intervals indicate standard error of the mean. The y-axis represents standardized scores ($M = 0$, $SD = 1$). The direction of the bars indicates whether participants scored above or below the mean. Longer bars represent greater deviation from the mean. Higher scores indicate more depression symptoms and more difficulties with activities of daily living (ADL).

exploration without commitment may be associated with negative outcomes (Torres, Yznaga, & Moore, 2011).

Third, no direct measure was available for national identity. We assessed host country orientation with language proficiency, community participation, perceived closeness, and feelings of loss. However, longing to the home country does not necessarily imply a lack of attachment to the host society (Klok et al., 2017). Fourth, cultural resources do not operate in a vacuum, but are influenced by the broader societal context. Experiences with racism and discrimination not only contribute to poor mental and physical health (Pascoe & Richman, 2009), but may also limit an individual's capacity to mobilize cultural resources (Kunst, Tajamal, Sam, & Ulleberg, 2012).

There are some methodological issues to consider too. The "classify-analyze" approach did not take into account uncertainty in the classification of participants into categories. This could have attenuated the relationships between class membership and other variables (Lanza, Tan, & Bray, 2013). Furthermore, analyses were based on cross-sectional data, providing only a snapshot of the physical and mental health of the participants. Studies with a life-course perspective would offer a more nuanced understanding of how cultural resources might support resilience as migrants age. The response rate was also relatively low, which could have introduced selection bias. Further, the resilience category was relatively small, which might have contributed to low power to detect significant differences.

Table 4. Coefficients of the Multinomial Logistic Regression Model (95% bootstrap confidence intervals for odds ratio based on 1,000 iterations)

	High emotional and physical vs resilient			Poor emotional and physical vs resilient			Poor emotional and high physical vs resilient			Very poor emotional and poor physical vs resilient		
	OR	95% CI		OR	95% CI		OR	95% CI		OR	95% CI	
		Lower	Upper		Lower	Upper		Lower	Upper		Lower	Upper
Male sex	4.04**	0.45	2.40	1.58	-0.35	1.36	1.63	-0.30	1.31	0.79	-1.32	0.74
Moroccan origin	1.73	-0.35	1.64	1.22	-0.59	1.21	2.21	0.01	1.79	4.96***	0.62	2.89
Income	1.31**	0.08	0.50	1.00	-0.19	0.21	1.13	-0.06	0.33	1.02	-0.19	0.24
Length of stay	0.94*	-0.12	0.00	0.96	-0.09	0.01	1.00	-0.05	0.06	0.95	-0.13	0.00
Mastery	1.07	-0.04	0.20	0.86***	-0.25	-0.07	1.03	-0.06	0.14	0.83***	-0.32	-0.10
Loneliness	0.91	-0.25	0.09	1.24**	0.08	0.39	1.17*	0.01	0.34	1.56***	0.29	0.65
Religious coping	0.61	-1.21	0.08	0.70	-1.15	0.23	0.55*	-1.33	-0.05	0.49*	-1.52	-0.03
Dutch language proficiency	3.08***	0.68	1.78	1.52	-0.06	0.97	1.69*	0.07	1.16	1.98*	0.10	1.42
Feelings of loss	1.04	-0.25	0.32	1.28	-0.02	0.55	1.15	-0.15	0.41	1.10	-0.25	0.42
Cultural identity (exploration)	1.37	-0.45	1.32	1.39	-0.41	1.28	1.32	-0.48	1.27	1.91	-0.26	1.72

Note: * $p < .05$, ** $p < .01$, *** $p < .001$; OR = Odds Ratio; the model is based on bootstrapped estimates where confidence intervals indicate significant effects if they do not include zero.

Additionally, it is important to note that the sample only included Turkish and Moroccan older adults, thus findings might not generalize to other immigrant groups.

Despite these limitations, we found consistent effects with mastery, loneliness, language proficiency, and religious coping in a predominantly Muslim sample. This shows that older labor migrants' emotional resilience to disabilities might be advanced by a combination of psychosocial and sociodemographic factors. While cultural factors seemed to play a limited role, findings with religious coping provide insights into potential protective influences. For Muslims, maintenance of cultural and religious practices and values are strongly intertwined. Religious and ethnic identities are perceived as increasingly overlapping among second generation Dutch Muslims (Maliepaard, Lubbers, & Gijsberts, 2010).

Conclusions

Cultural resources have been shown to provide health benefits, which may explain why immigrants fare better than their native peers in the initial years after migration (a phenomenon known as the healthy immigrant effect; Gallo, Penedo, Espinosa de los Monteros, & Arguelles, 2009). However, these effects do not seem to extend to old age and the context of disability (Klokgieters et al., 2018b). Further, factors contributing to differences between groups (migrants vs natives) do not necessarily yield the same benefits if we look at variations within these groups, which highlights the importance of investigating between- and within group resilience as separate issues.

Overall, findings suggest that policies and interventions aimed at alleviating loneliness, facilitating mastery, and enabling religious coping have the potential to promote psychological resilience to disabilities in older labor migrants. This may include health education targeting older migrants to increase knowledge about living with disabilities and available services, policies eliminating formal and informal barriers to accessing care, or creating supportive environments in community settings that consider the needs and resources of older migrants to promote informed decision making. These initiatives should be designed to facilitate culturally sensitive management of physical health conditions in migrant populations.

Supplementary Data

Supplementary data are available at *The Gerontologist* online.

Supplementary Table 1. Correlation matrix of study variables

Supplementary Figure 1. Prototypical Profile Configurations: six-profile Solution. Confidence intervals indicate standard error of the mean. The Y-axis represents standardized scores ($M = 0$, $SD = 1$). The direction of the bars indicates whether participants scored above or below the mean. Longer bars represent greater deviation from the mean. Higher scores indicate more depression symptoms and more difficulties with activities of daily living (ADL).

Supplementary Table 2. Descriptive and univariate statistics of study variables by profile.

Funding

The Longitudinal Aging Study Amsterdam is supported by a grant from the Netherlands Ministry of Health, Welfare and Sports, Directorate of Long-Term Care. The data collection (in 2012–2013 and 2013–2014) was financially supported by the Netherlands Organization for Scientific Research (NWO) in the framework of the project “New Cohorts of young old in the 21st century” (file number 480-10-014). M. H. was supported by a Vidi Fellowship from the Netherlands Organisation for Scientific Research (project number 452-11-017).

Conflict of Interest

None reported.

Ethical Standards

The authors assert that all procedures contributing to this work comply with the ethical standards of the medical ethics committee of the VU University Medical Center and with the Helsinki Declaration of 1975, as revised in 2008.

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